

In the Claims

1-65. (Canceled)

66. (Currently amended) A composition, comprising: at least one isolated nucleic acid molecule that encodes at least one polypeptide that catalyzes at least one step in the synthesis of at least one polyketide or bryopyran ring, or the complement thereof, wherein the at least one polypeptide comprises at least one activity of a polyketide synthase, and wherein the at least one nucleic acid is derived from at least one marine organism molecule hybridizes under hybridization conditions of 0.015 M NaCl/0.0015 M sodium citrate, 0.1% SDS at 50°C to SEQ ID NO:37 or the complement thereof.

67. (Currently amended) The composition of claim 66, wherein said the at least one bryopyran ring comprises at least one bryostatin.

68-69. (Canceled)

70. (Currently amended) The composition of claim 69 66, wherein said the at least one nucleic acid molecule is a nucleic acid of a bacteria comprises at least one Candidatus.

71. (Currently amended) The composition of claim 70, wherein said at least the Candidatus comprises at least one *Endobugula*.

72. (Currently amended) The composition of claim 71, wherein at least one the *Endobugula* is comprises at least one *Endobugula sertula*.

73. (Currently amended) The composition of claim 69 66, wherein the nucleic acid molecule is a nucleic acid found in at least one invertebrate comprises at least one *Bugula* or a symbiont thereof.

74. (Currently amended) The composition of claim 73, wherein ~~at least one~~ the *Bugula* is *Bugula neritina*, or *Bugula pacifica*.

75-87. (Canceled)

88. (Currently amended) An isolated nucleic acid molecule comprising ~~any one of~~ SEQ ID NO: NOS. 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, or the complement thereof.

89. (Canceled)